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ENTERED

RAW SEQUENCE LISTING

PATENT APPLICATION: US/10/091,333

DATE: 01/15/2003 ^{8/6}

TIME: 13:26:11

Input Set : A:\SequenceListing.txt

Output Set: N:\CRF4\01152003\J091333.raw

3 <110> APPLICANT: EINAT, Paz
4 SKALITER, Rami
6 <120> TITLE OF INVENTION: HYPOXIA-REGULATED GENES
8 <130> FILE REFERENCE: EINAT=1.1D
C--> 10 <140> CURRENT APPLICATION NUMBER: US/10/091,333
C--> 10 <141> CURRENT FILING DATE: 2002-03-06
10 <150> PRIOR APPLICATION NUMBER: US 09/604,978
11 <151> PRIOR FILING DATE: 2000-06-28
13 <150> PRIOR APPLICATION NUMBER: US 09/138,112
14 <151> PRIOR FILING DATE: 1999-08-21
16 <150> PRIOR APPLICATION NUMBER: US 60/056,453
17 <151> PRIOR FILING DATE: 1997-08-21
19 <160> NUMBER OF SEQ ID NOS: 11
21 <170> SOFTWARE: PatentIn version 3.1
23 <210> SEQ ID NO: 1
24 <211> LENGTH: 1754
25 <212> TYPE: DNA
26 <213> ORGANISM: Rattus norvegicus
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31 catcagttcg ctcacccttc gagaggcaga tcgctcttgt ccgcaatctt cgctgaccgc 120
33 gctagctgcg gcttctgtgc tccttcgccc aacctcatca accagcgctc tggcgctcga 180
35 cctcgccatg cctagccttt gggatcgttt ctcgctcctc tcttcctctt cgtcctcgtc 240
37 ccgaactccg gccgctgacg ggccgcccgc ctccgcctgg gggctctgcg ccagagaaga 300
39 gggccttgac cgctgcgcga gcctggagag ctccgactgc gaggccctgg acagcagcaa 360
41 cagtggcctt gggccggagg aagactcctc atacctggat ggggtgtctc tgctgactt 420
43 tgagctgctc agtgaccccg aggatgagca cctgtgtgcc aacctgatgc agctgctgca 480
45 ggagagcctg tcccaggcgc gattgggctc gcggcgccct gcgcgcctgc tgatgccgag 540
47 ccagctgttg agccaggtgg gcaaggaact cctgcgcctg gcgtacagcg agccgtgcgg 600
49 cctgcggggg gcaactgctg acgtctgtgt ggagcaaggc aagagctgcc atagtgtggc 660
51 tcagctggct ctggacccca gtctagtgcc cacctttcag ttgaccctgg tgctgcgtct 720
53 ggactctcgc ccttgccca agatccaggg cctgttgagt tctgccaact cttccttggt 780
55 ccctggttac agccagctcc tgacgctgag caccggcttc agagtcacaa aaaagaaact 840
57 ctacagctcc gagcagctgc tcattgaaga gtgttgaaact tcgtcctgga ggggggcccgc 900
59 actgcccccc aaagtggaga caagggaattt ctgtgttgga gaccgcagcg caaggactga 960
61 aggactgtcc cctgtgttag aaaactgaca atagccaccg gaggggcccga gggccagggtg 1020
63 ggagaaggaa gtgtgttcca ggaagtctct aggttgtgtg cagggtggccc cctgttgagg 1080
65 cacatgcccc tcagtactgt agcatgaaac aaaggcttcg gagccacaca ggcttctggc 1140
67 tggatgtgta ttagcatgt atcttattaa tttttgtatt actgacaagt tacaacagca 1200
69 gttgtggggc agagtcagaa gggcagctgg tctgcaactg cctctgcccg ggctgtgtgc 1260
71 tggggggagg cggggggagg tctccgacag tttgtcgaca gatctcatgg tctgaaagga 1320
73 ccgagcttgt tcgtcgtttg gtttgtatct tgttttgggg gtgggggtgg gggatcggag 1380
75 cttcactact gacctgttcg aggcagctat cttacagact gcatgaatgt aagaatagga 1440

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77 aggggggtggg tgtaggagtc atttgggagc ttcaacactt gaaacaaaat aacaccaggg 1500
79 agctgcatcc cagcccatcc cgggtgccgt gtactggagg agtgaactgt gaggggatgg 1560
81 ggctgagggg ggtggggggc tggaaacctc tccccagag gagcgccacc tgggtcttcc 1620
83 atctagaact gtttacatga agatactcac ggttcatgaa tacacttgat gttcaagtac 1680
85 taagacctat gcaatatttt tacttttcta ataaacatgt ttgttaaaac aaaaaaaaaa 1740
87 aaaaaaaaaa aaaa 1754
90 <210> SEQ ID NO: 2
91 <211> LENGTH: 1782
92 <212> TYPE: DNA
93 <213> ORGANISM: Homo sapiens
95 <400> SEQUENCE: 2
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100 gcacttgtct tagcagttct cgctgaccgc gctagctgcg gcttctacgc tccggcactc 180
102 tgagttcatc agcaaacgcc ctggcgctcg tcctcaccat gcctagcctt tgggaccgct 240
104 tctcgtcgtc gtccacctcc tcttcgccct cgtccttgcc ccgaactccc accccagatc 300
106 ggccgcccgc ctcagcctgg gggtcggcga cccgggagga ggggtttgac cgctccacga 360
108 gcctggagag ctcggactgc gaggccctgg acagcagcaa cagtggcttc gggccggagg 420
110 aagacacggc ttacctggat ggggtgtcgt tgcccgactt cgagctgctc agtgaccctg 480
112 aggatgaaca cttgtgtgcc aacctgatgc agctgctgca ggagagcctg gccagggcgc 540
114 ggctgggctc tcgacgccct gcgcgcctgc tgatgcctag ccagttggta agccaggtgg 600
116 gcaaagaact actgcgcctg gcctacagcg agccgtgcgg cctgcggggg gcgctgctgg 660
118 acgtctgcgt ggagcagggc aagagctgcc acagcgtggg ccagctggca ctcgacccca 720
120 gcctgggtgcc caccctccag ctgaccctcg tgcctgcgct ggactcacga ctctggccca 780
122 agatccaggg gctgttttag tccgccaact ctcccttcct ccctggcttc agccagtccc 840
124 tgacgctgag cactggcttc cgagtcacga agaagaagct gtacagctcg gaacagctgc 900
126 tcattgagga gtgttgaact tcaacctgag ggggcccaga gtgccctcca agacagagac 960
128 gactgaactt ttgggggtgga gactagaggc aggagctgag ggactgattc ctgtggttg 1020
130 aaaactgagg cagccaccta aggtggagggt gggggaatag tgtttcccag gaagctcatt 1080
132 gagttgtgtg cgggtggctg tgcatggggg acacataccc ctgagtactg tagcatgaaa 1140
134 caaaggctta ggggcccaaca aggcttcagg ctggatgtgt gtgtagcatg taccttatta 1200
136 tttttgttac tgacagttaa cagtgggtgt acatccagag agcagctggg ctgctcccg 1260
138 ccagcccggg ccaggggtga aggaagaggc acgtgctcct cagagcagcc ggagggaggg 1320
140 gggaggtcgg aggtcgtgga ggtggtttgt gtatcttact ggtctgaagg gaccaagtgt 1380
142 gtttgttgtt tgtttgtat cttgtttttc tgatcggagc atcactactg acctgttgta 1440
144 ggcagctatc ttacagacgc atgaatgtaa gagtaggaag gggtggtgtg cagggatcac 1500
146 ttgggatctt tgacacttga aaaattacac ctggcagctg cgtttaagcc ttcccccatc 1560
148 gtgtactgca gaggtagct ggcaggggag gggctgagag ggtgggggct ggaacccctc 1620
150 cccgggagga gtgccatctg ggtcttccat ctagaactgt ttacatgaag ataagatact 1680
152 cactgttcat gaatacactt gatgttcaag tattaagacc tatgcaatat tttttacttt 1740
154 tctaataaac atgtttgtta aaacaaaaaa aaaaaaaaaa aa 1782
157 <210> SEQ ID NO: 3
158 <211> LENGTH: 1900
159 <212> TYPE: DNA
160 <213> ORGANISM: Rattus norvegicus
162 <400> SEQUENCE: 3
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165 atgggccgcg gctggggctt gctcgtcgga ctcttgggcg tcgtgtggct gctgcggtcg 120
167 ggccagggcg aggagcagca gcaggagaca gcggcacagc ggtgtttctg tcaggttagt 180
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169 ggttacctgg atgactgtac ctgtgatgtc gagaccatcg ataagtttaa taactacaga 240
171 cttttcccaa gactacaaaa gtccttgaa agtgactact ttagatacta caaggtaaac 300
173 ttgaggaagc catgtccttt ctggaatgac atcaaccaat gtggaagaag agactgtgct 360
175 gtcaaaccct gccattctga tgaagtcctt gatggaatta agtctgcgag ctacaagtat 420
177 tccaaggaag ccaacctcct tgaggagtgt gagcaggctg agcggctcgg agcagtggac 480
179 gaatctctga gtgaggagac ccagaaggct gttcttcagt ggacgaaaca cgatgattct 540
181 tcagacagct tctgtgaagt tgatgacata cagtcccccg atgctgagta tgtggattta 600
183 ctccctaacc ctgagcgcta cacaggctac aaggggccgg acgcttgagg gatatggagt 660
185 gtcattctat aagaaaactg ctttaagcca cagacaattc aaaggccttt ggcttcgggg 720
187 caaggaaaac ataaagagaa cacattttac agctggctag aaggcctctg tgtagaaaag 780
189 agagcattct acaggcttat atctggccta cagcaagca tcaatgtaca tttgagtgc 840
191 aggtatcttt tacaagataa ttggctggaa aagaaatggg gtcataatgt cacagagttt 900
193 cagcagcgct ttgatggggt ttgacagaa ggagaaggcc ccaggaggct gaagaacctg 960
195 tactttcttt acctgataga gtttaagggt ctctctaaag tgcttcggtt tttcgagcgc 1020
197 ccagattttc agctcttcac tggaataaaa gttcaggatg tggaatacaa agagtactt 1080
199 ctggagattc ttcattgaag caagtcattt cctttgcatt ttgatgagaa ttcttttttt 1140
201 gcgggggata aaaacgaagc acataagcta aaggaggact tccgcctaca ctttagaaac 1200
203 atctcgagga tcatggactg cgtcggctgc ttcaagtgcc gcctgtgggg caagcttcag 1260
205 actcagggtc tgggcactgc tctgaagatc ttgttttctg aaaaactgat cgcaaatatg 1320
207 cccgaaagcg gaccagttta tgaattccag ctaaccagac aagaaatagt gtcgttggtc 1380
209 aatgcattcg gaaggatttc cacaagtgtg agagaattag agaacttcag acacttggtt 1440
211 cagaatgttc actgaggagg gcggctggaa cctgcttggt tctgcacagg ggagtccaga 1500
213 gggcagaatg tctgagcacg gtgattgcag tgaccgtcct gagccaaacg ttcatatcaa 1560
215 gctgcctttg tcaaaggaga gatacattgt ttttaagtaa tgacattttt aaacattgtg 1620
217 ttcattgtta atattattgt gaataaaaagt agtattttgg taatgtacaa attttaatac 1680
219 taagcaaaaag taaggtcatt aaattgccct atgatggggt tggggattta gctcagtgg 1740
221 agagctcttg cctaggaagc gcaaggccct ggggtcggtc ccagctccg aaaaaaaga 1800
223 accccccccc caaaaaaat tgccccata aaaagggtag gtgaatcctg cccagggctc 1860
225 tccacctaaa tttttttttg aaaacttttt tcccccaagg 1900
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228 <210> SEQ ID NO: 4

229 <211> LENGTH: 4121

230 <212> TYPE: DNA

231 <213> ORGANISM: Rattus norvegicus

233 <220> FEATURE:

234 <221> NAME/KEY: misc_feature

235 <222> LOCATION: (16)..(17)

236 <223> OTHER INFORMATION: n is any nucleotide

239 <220> FEATURE:

240 <221> NAME/KEY: misc_feature

241 <222> LOCATION: (21)..(21)

242 <223> OTHER INFORMATION: n is any nucleotide

245 <220> FEATURE:

246 <221> NAME/KEY: misc_feature

247 <222> LOCATION: (24)..(25)

248 <223> OTHER INFORMATION: n is any nucleotide

251 <220> FEATURE:

252 <221> NAME/KEY: misc_feature

253 <222> LOCATION: (30)..(31)

254 <223> OTHER INFORMATION: n is any nucleotide

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257 <220> FEATURE:
258 <221> NAME/KEY: misc_feature
259 <222> LOCATION: (40)..(40)
260 <223> OTHER INFORMATION: n is any nucleotide
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265 <222> LOCATION: (50)..(50)
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271 <222> LOCATION: (52)..(52)
272 <223> OTHER INFORMATION: n is any nucleotide
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276 <221> NAME/KEY: misc_feature
277 <222> LOCATION: (65)..(65)
278 <223> OTHER INFORMATION: n is any nucleotide
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283 <222> LOCATION: (67)..(67)
284 <223> OTHER INFORMATION: n is any nucleotide
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288 <221> NAME/KEY: misc_feature
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290 <223> OTHER INFORMATION: n is any nucleotide
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307 <222> LOCATION: (94)..(95)
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313 <222> LOCATION: (99)..(99)
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319 <222> LOCATION: (101)..(101)
320 <223> OTHER INFORMATION: n is any nucleotide
323 <220> FEATURE:
324 <221> NAME/KEY: misc_feature
325 <222> LOCATION: (106)..(106)
326 <223> OTHER INFORMATION: n is any nucleotide
329 <220> FEATURE:

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330 <221> NAME/KEY: misc_feature
331 <222> LOCATION: (117)..(117)
332 <223> OTHER INFORMATION: n is any nucleotide
335 <220> FEATURE:
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337 <222> LOCATION: (119)..(119)
338 <223> OTHER INFORMATION: n is any nucleotide
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342 <221> NAME/KEY: misc_feature
343 <222> LOCATION: (122)..(122)
344 <223> OTHER INFORMATION: n is any nucleotide
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348 <221> NAME/KEY: misc_feature
349 <222> LOCATION: (125)..(125)
350 <223> OTHER INFORMATION: n is any nucleotide
353 <220> FEATURE:
354 <221> NAME/KEY: misc_feature
355 <222> LOCATION: (128)..(129)
356 <223> OTHER INFORMATION: n is any nucleotide
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361 <222> LOCATION: (133)..(133)
362 <223> OTHER INFORMATION: n is any nucleotide
365 <220> FEATURE:
366 <221> NAME/KEY: misc_feature
367 <222> LOCATION: (138)..(138)
368 <223> OTHER INFORMATION: n is any nucleotide
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372 <221> NAME/KEY: misc_feature
373 <222> LOCATION: (141)..(141)
374 <223> OTHER INFORMATION: n is any nucleotide
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378 <221> NAME/KEY: misc_feature
379 <222> LOCATION: (147)..(147)
380 <223> OTHER INFORMATION: n is any nucleotide
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384 <221> NAME/KEY: misc_feature
385 <222> LOCATION: (164)..(164)
386 <223> OTHER INFORMATION: n is any nucleotide
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390 <221> NAME/KEY: misc_feature
391 <222> LOCATION: (167)..(167)
392 <223> OTHER INFORMATION: n is any nucleotide
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396 <221> NAME/KEY: misc_feature
397 <222> LOCATION: (1375)..(1375)
398 <223> OTHER INFORMATION: n is any nucleotide
401 <220> FEATURE:
402 <221> NAME/KEY: misc_feature

RAW SEQUENCE LISTING ERROR SUMMARY
PATENT APPLICATION: US/10/091,333

DATE: 01/15/2003
TIME: 13:26:12

Input Set : A:\SequenceListing.txt
Output Set: N:\CRF4\01152003\J091333.raw

Please Note:

Use of n and/or Xaa have been detected in the Sequence Listing. Please review the Sequence Listing to ensure that a corresponding explanation is presented in the <220> to <223> fields of each sequence which presents at least one n or Xaa.

Seq#:4; N Pos. 16,17,21,24,25,30,31,40,50,52,65,67,75,80,88,89,90,94,95,99
Seq#:4; N Pos. 101,106,117,119,122,125,128,129,133,138,141,147,164,167,1375
Seq#:4; N Pos. 1384,1389,1402,1413,1457,1472,1488,1493,1497,1499,1963,2250
Seq#:4; N Pos. 2278,2282,4102,4106
Seq#:11; Xaa Pos. 307,310,312,316,320,345,346,348,503,599,608,609

VERIFICATION SUMMARY

PATENT APPLICATION: US/10/091,333

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Input Set : A:\SequenceListing.txt

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L:10 M:270 C: Current Application Number differs, Replaced Current Application No
 L:10 M:271 C: Current Filing Date differs, Replaced Current Filing Date
 L:498 M:341 W: (46) "n" or "Xaa" used, for SEQ ID#:4 after pos.:0
 L:500 M:341 W: (46) "n" or "Xaa" used, for SEQ ID#:4 after pos.:60
 L:502 M:341 W: (46) "n" or "Xaa" used, for SEQ ID#:4 after pos.:120
 L:542 M:341 W: (46) "n" or "Xaa" used, for SEQ ID#:4 after pos.:1320
 L:544 M:341 W: (46) "n" or "Xaa" used, for SEQ ID#:4 after pos.:1380
 L:546 M:341 W: (46) "n" or "Xaa" used, for SEQ ID#:4 after pos.:1440
 L:562 M:341 W: (46) "n" or "Xaa" used, for SEQ ID#:4 after pos.:1920
 L:572 M:341 W: (46) "n" or "Xaa" used, for SEQ ID#:4 after pos.:2220
 L:574 M:341 W: (46) "n" or "Xaa" used, for SEQ ID#:4 after pos.:2280
 L:634 M:341 W: (46) "n" or "Xaa" used, for SEQ ID#:4 after pos.:4080
 L:1336 M:341 W: (46) "n" or "Xaa" used, for SEQ ID#:11 after pos.:304
 L:1344 M:341 W: (46) "n" or "Xaa" used, for SEQ ID#:11 after pos.:336
 L:1384 M:341 W: (46) "n" or "Xaa" used, for SEQ ID#:11 after pos.:496
 L:1408 M:341 W: (46) "n" or "Xaa" used, for SEQ ID#:11 after pos.:592
 L:1412 M:341 W: (46) "n" or "Xaa" used, for SEQ ID#:11 after pos.:608